

ABSTRACT OF THE DISCLOSURE

In a line quality monitoring method of detecting a code error rate by identifying a received optical signal using different identification levels and
5 executing bit comparison after identification, an amplitude of the signal and noise power contained in the signal are detected, and a difference between the different identification levels is controlled to be
10 inversely proportional to the amplitude of the signal and to be proportional to the noise power of the signal. Alternatively, the amplitude of the signal is controlled to be constant and the difference between the different identification levels is controlled to be proportional to the noise power of the signal.